AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Previously presented) A voltage subtractor/adder circuit comprising:

a current subtractor and a current-to-voltage converting means providing an output

terminal for outputting an output voltage in proportion to the subtraction of two input voltage;

and

a differential pair having first and second MOS transistors, both gate electrodes of said first and second MOS transistors forming input terminals for receiving an input differential voltage each voltage of said two input voltages, respectively, drain electrodes of said first and second MOS transistors supplying a differential current to said current subtractor forming output terminals for outputting a signal to be subtracted, and source electrodes of said first and second MOS transistors being commonly coupled to form an output terminal for outputting half an output voltage in proportion to the addition of two input voltages outputting a voltage to be added; and

wherein the sums of currents flowing through said first and second MOS transistors increases in proportion to the square of a difference of said two input voltages said input differential voltage.

- 2. (Original) A voltage subtractor/adder circuit as set forth in claim 1, further comprising a level shifter for level-shifting said addition output voltage from said source electrodes which are commonly coupled.
- 3. (Previously presented) A voltage subtractor/adder circuit comprising:
 a differential pair having first and second MOS transistors, gate electrodes of said first and second MOS transistors forming input terminals for receiving an input differential voltage, drain electrodes of said first and second MOS transistors forming output terminals for outputting a signal to be subtracted, and source electrodes of said first and second MOS transistors being commonly coupled to form an output terminal for outputting a voltage to be added; and a constant current source which drives said differential pair.
- 4. (Original) A voltage subtractor/adder circuit as set forth in claim 3, further comprising a level shifter for level-shifting said addition output voltage from said source electrodes which are commonly coupled.